

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008765**Date Inspected:** 26-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Xu Xian Ping		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No
Rod Oven in Use:	Yes	No N/A
Weld Procedures Followed:	Yes	No N/A
Verified Joint Fit-up:	Yes	No N/A
Approved WPS:	Yes	No N/A
Delayed / Cancelled:	Yes	No N/A
Component:	OBG & TOWER Components	

Bridge No: 34-0006**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

BAY 1

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #119 located on Cross Beam CB201G – 014. Welder is identified as 216575. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4c – F.

FCAW process welding of weld joint #103 located on Cross Beam CB201G – 016. Welder is identified as 216575. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4c – F.

BAY 2

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #055 located on Floor Beam FB3029 – 001. Welder is identified as 045203. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the

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WPS – B – T – 2132 – 3.

FCAW process welding of weld joint #096 located on Floor Beam FB3065 – 002. Welder is identified as 045203. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F.

FCAW process welding of weld joint #073 located on Floor Beam FB3029 – 001. Welder is identified as 045203. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

BAY 3

This QA Inspector observed the following work in progress:

SAW process welding of weld joint #001 located on Cross Beam CB202F – 014. Welder is identified as 062406. ZPMC QC is identified as Guo Yuan Ting. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2c – S – 2.

BAY 6

Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG & TOWER Components. The weld designations reviewed are as follows:

OBG Components

1. SP3020 – 001 – 001 ~ 010 – Green Tag # 010387
2. SP3005 – 001 – 002 ~ 010

TOWER Components

1. SSD1 – 139M Diaphragm
 - a. SSD1 – DPSA4 – 19B/B – 3 – Green Tag # 005864
2. SSD1 – 143M Diaphragm
 - a. SSD1 - DPSA4 – 9B/B – 3 – Green tag # 005865

Hardness Testing:-

Witnessed hardness testing at bay#6 on a fillet weld SP3010-001-064 both web and flange HAZ areas. Hardness testing performed by ZPMC QC identified as Shu Yang Hua.

Hardness values on web HAZ area:-

163; 176; 150; 151; 146

Hardness values on Flange HAZ area:-

155; 159; 144; 142; 139

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #9B located on WD1 – A305 – 65M – 4. Welder is identified as 037780.

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ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2212 – Tc – U5b.

SMAW process welding of weld joint #11 located on WD1 – A305 – 65M – 3. Welder is identified as 069493. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2112.

SMAW process welding of weld joint #9A located on WD1 – A305 – 65M – 1. Welder is identified as 066456. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2212 – Tc – U5b.

This QA Inspector observed the following work not in compliance:

During random verification Magnetic Particle Testing (MT) for the OBG side plate at Bay # 6, observed one (1) Transverse linear indication approximately 7mm in length in the weld metal on SP3005-001-001.

This area is outside of the 10% area tested by ZPMC Quality Control personnel.

For Further details please see the incident report: - 040120F4_TL-15_B227_08-26-09_ (MT) Transverse Indications.

BAY 7

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #025 located on Deck Plate DP3011 – 001. Welder is identified as 205774. ZPMC QC is identified as Shen Jian Guo. The welding variables recorded by QC appeared to comply with the WPS – B – T – 4132.

FCAW process welding of weld joint #003 located on Deck Plate DP3001 – 001. Welder is identified as 062447. ZPMC QC is identified as Shen Jian Guo. The welding variables recorded by QC appeared to comply with the WPS – B – T – 4132.

FCAW process welding of weld joint #030 located on Deck Plate DP3011 – 001. Welder is identified as 062447. ZPMC QC is identified as Shen Jian Guo. The welding variables recorded by QC appeared to comply with the WPS – B – T – 4132.

BAY 8

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #157 located on Cross Beam CB201G – 033. Welder is identified as 066687. ZPMC QC is identified as Zhang Jing Xin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

FCAW process welding of weld joint #180 located on Cross Beam CB201G – 035. Welder is identified as 069118. ZPMC QC is identified as Zhang Jing Xin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

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FCAW process welding of weld joint #140 located on Cross Beam CB201G – 034. Welder is identified as 066687. ZPMC QC is identified as Zhang Jing Xin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Prue,Erik	QA Reviewer
